

## Advantageous Inflation



High fuel prices not only take their toll at the pump, they affect tyre prices as well because oil is a major ingredient in their manufacture. One simple and immediate way to make the most of fuel and tyre expense is to pay greater attention to proper tyre maintenance.

Air pressure is at the heart of proper tyre maintenance. By maintaining the correct inflation pressure for a given size of tyre and load, tyres will provide the best fuel mileage and safety, while minimising wear and maximizing wear resistance. Commercial tyre manufacturers have tables and charts - available free for the asking - that specify air pressure adjustments for tyre size, load and speed.

Inflation pressure is critical because it is the air inside the tyre that carries the weight of a vehicle, absorbs shock and keeps the tyre in its proper shape so it may perform as designed. In essence, the tyre serves as the container for the air. In addition to affecting rolling resistance, and thus fuel economy, inflation pressure also influences handling, traction, braking and load-carrying capability.

### Improper inflation

Tyres are made of layers of fabric and steel cords encased in rubber. These cords provide additional operating characteristics.

Tyres flex when they roll, which bends these components, and in turn, generates internal heat - a tyre's worst enemy. Wear is the result of friction created between the road's surface and the tread as the tyre rolls along.

A tyre that is improperly inflated doesn't roll as smoothly or as easily as it was designed to, causing fuel efficiency to fall off since the engine has to work harder to keep the vehicle moving.

Improperly inflated tyres have an uneven, irregular tyre footprint - that portion that contacts the road surface. This inconsistent shape leads to increased wear, reduced traction and performance, and handling and ride problems.

Under inflation causes excessive flexing and is a major contributor to premature tyre problems. There is a direct correlation between how much a tyre is under inflated and how much faster it wears and fuel burn. Increased fuel burn also means increased CO2 emissions.

